Backgrounder

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Canada-U.S. Free Trade: The Regional Impact

Anthony Chapman
Gerald Goldstein
Economics Division

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CANADA-U.S. FREE TRADE: THE REGIONAL IMPACT

INTRODUCTION

This study examines the probable impact of free trade on Canada and its various regions in light of recent trade theory and evidence. The use of fresh assumptions has dramatically altered the size and source of gains from a free trade arrangement, which, in turn, has forced researchers to re-examine the effects on the regions.

The first section of this paper discusses the regional and sectoral impact of free trade in general terms under both traditional trade theory and with recent alternative assumptions. Evidence is suggested to support the change to a new trade model. Results from three different free trade studies that incorporate the new assumptions of economies of scale and imperfect competition are also presented.

Finally, this paper takes a more detailed look at the likely impact of a Canada-U.S. free trade arrangement on the individual regions of this country and on selected industrial sectors. It is obvious from the often contradictory results presented that the actual effect of free trade on a number of industrial sectors remains in doubt.

BACKGROUND THEORY AND EVIDENCE

There have been a number of studies undertaken to determine the economic impact on Canada of free trade with the United States. And although a range of outcomes has been postulated, substantial agreement exists among economists that such an arrangement would provide economic gains for Canadians. Given that the exact nature of the agreement and the

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length of the phase-in period have yet to be determined, a range of outcomes is not surprising.

According to studies submitted to the Macdonald Commission, the long-term economic gains resulting from bilateral free trade with the United States are likely to range from 3% to 8% of Canadian GNP, once the Tokyo round tariff cuts are fully implemented. The Commission report accounted for the range of estimates in the following way:

> In many instances, these differences are the result of the different methods and data employed by the researchers and this variety makes it impossible to predict with absolute precision the effects of free trade. Nevertheless, the results of the analyses have convinced us that such disagreements as exist are quantitative and not qualitative. The debate concerns the size of long-term gains that free trade has to offer Canada, not whether such gains will occur.(1)

Other estimates of the gains from bilateral free trade between Canada and the United States have arrived at much more modest benefits - less than 1% of GNP in some cases. If the size of the gains are indeed this small, the negotiation of a free trade arrangement begins to look much less significant. How large are the gains from a free trade arrangement and what accounts for the difference in the estimates given by the Macdonald Commission and some other studies?

A. Traditional Trade Theory

Generally, the studies which have found extremely small gains resulting from a free trade arrangement have been predicated on traditional neoclassical economic assumptions of competitive markets, no cost savings from expanded levels of production, the free movement of factors between regions but not internationally, and an economy operating at full employment.

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(1) Canada, Royal Commission on the Economic Union and Development Prospects in Canada, Report - Volume 1, Supply and Services Canada, Ottawa, 1985, p. 330.

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The assumption of perfectly competitive markets implies that no individual firm can influence the price of its product; that is, that supply and demand in the market set the price. Further, free entry into the industry ensures that firms earn no excess profits, simply the competitive rate of return.

The assumption of no cost savings from expanding output, or constant returns to scale, means that, as output is expanded, unit costs are constant (over the long run).

Under these assumptions, traditional trade theory indicates that removal of trade barriers would tend to increase a country's production of goods in which it has a comparative advantage and decrease its production of other goods. Since Canada is generally understood to hold a comparative advantage in the production of resource-related products, this approach would conclude that, under free trade, Canada would increase its specialization in the production of such products. At the same time, the manufacturing sector would likely become relatively less important. Regionally, this implies relative economic gains for the resource-producing regions of western Canada and the Atlantic provinces, but relative losses for Ontario and Quebec, where much of the nation's manufacturing sector is located.

Since the production of resources is a capital-intensive activity, relative returns to capital would increase. On the other hand, relative returns to labour, the factor used intensively in manufacturing, would decline. Elimination of tariffs on manufactured goods would cause their prices to decline relative to those of resource-based goods. It would also imply an increase in the <u>real</u> return to capital, the intensive factor in resource production, and a decrease in the <u>real</u> return to labour, the intensive factor in manufacturing.

In summary, although finding net economic gains from a free trade arrangement, traditional economic theory would predict that Canadians would increase their tendency to be "hewers of wood and drawers of water."

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B. Recent Theory

Recently, Canadian economists have begun to focus on this country's particular circumstances which violate the four primary assumptions of traditional trade theory:

1) factors of production which are mobile between regions but not internationally;

2) constant returns to scale in production;

3) perfect competition between firms; and

4) an economy operating at full employment.

With respect to the first assumption, capital can flow between Canada and the United States with little impediment while, in general, labour is not free to transfer its services across the border.

With respect to the second assumption, economists have found that the relatively small size of the Canadian market prohibits attainment of a sufficient level of output to achieve the lowest cost per unit of output in many industries. Evidence of this is suggested by fact that Canadian firms have smaller size and lower productivity than American firms. Violation of the assumption of constant returns to scale means that tariffs are imposing an efficiency cost on the economy that is not taken into account under traditional trade theory.

One type of economy of scale is evident in heavy manufacturing industries, such as electricity generation, automobile production, steel-making and aluminum production, all of which rely on large plant size to keep unit costs low.

Length of production runs is another factor affecting unit costs. The longer the production run, the greater the number of units over which fixed costs can be spread. Canada's small protected market, combined with diverse consumer tastes, results in a wide variety of goods produced in relatively short inefficient runs. Eliminating trade barriers would allow Canadian producers to specialize in large-scale production of selected product lines, while imports could satisfy domestic demand for discontinued lines. Quality improvements could also be made in the specialized lines of goods that continued to be produced, providing further benefits to consumers.

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Another well-known benefit from increasing the scale and rate of production derives from the "learning curve effect." If firms gain from experience and their level of efficiency increases with each unit of the good produced, then raising the rate of production may enable them to move down their learning curve over a shorter interval of time.

Also related to the scale of production are "economies of scope." These involve spreading marketing or product design costs over a large number of units, something that is available to firms serving large markets.

The small size of the Canadian market has also been found to restrict the number of competing firms. Decreased competition implies higher prices and lower consumer welfare than would be obtained under perfect competition.

Finally, full employment output is more often an ideal than a reality in recent years. With substantial slack in factor and product markets, it is uncertain whether prices and wage rates would react in the manner prescribed by traditional trade theory.

Higher transportation costs are also imposed on Canadians by trade barriers between Canada and the United States. For example, goods produced in Ontario behind a tariff wall may be shipped from that province as far as British Columbia rather than from a closer location in the U.S. This implies that some of the benefits normally assumed to accrue to producers who enjoy tariff protection may profit transportation firms instead.

C. Evidence

Eastman and Stykolt found evidence in Canada of inefficient plant size in high tariff/high concentration industries.(2) The authors hypothesized that domestic concentration in the absence of tariff protection was not problematic since it implied sufficient competition from abroad. Similarly, a large number of domestic producers in an industry

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(2) H.C. Eastman and S. Stykolt, The Tariff and Competition in Canada, Macmillan, Toronto, 1967.

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with high tariff protection should indicate an adequate-sized domestic market to foster competition, according to the authors.

In other studies, Baldwin and Gorecki presented further evidence of inefficient scale in Canadian industries with high tariffs.(3) The average size of larger Canadian plants was reported to be smaller than that of larger U.S. plants but between 1970 and 1979, the size of Canadian plants increased by about 33%, while average Canadian tariffs fell by 30% from 1966 to 1978. At the same time, the size of the Canadian manufacturing industry did not decline, implying that lower tariffs led to plant scale increases rather than industry disappearance.

One of the first studies to incorporate the benefits deriving from economies of scale in an examination of the impact of bilateral free trade between Canada and the United States was done by Paul and Ronald Wonnacott.(4) Industry studies were used to estimate an efficiency gap in Canadian plants which was viewed as resulting from the diseconomies of small-scale production. Although the Wonnacotts' imputation of the efficiency gap to small-scale production appeared questionable at the time, subsequent studies using alternative estimation means have confirmed their findings. Using these results, the Wonnacotts estimated that Canada-U.S. free trade could raise manufacturing wages by 30% and raise real GNP by 10%.

This study, though controversial, was a landmark in free trade studies for several reasons. Not only did it calculate a much larger gain from bilateral free trade than had previous studies, it derived these gains from different sources. In contradiction to traditional neoclassical analysis, some of these gains were seen as likely to result from an

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(3) Findings summarized in James R. Markusen, "Canadian Gains from Trade in the Presence of Scale Economies and Imperfect Competition," in John Whalley, ed., Canada-United States Free Trade, University of Toronto Press, Toronto, 1985, p. 134.

(4) Ibid., p. 136.

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expansion of the manufacturing sector. While traditional analyses interpreted higher Canadian manufacturing costs as indicative of a comparative disadvantage in the sector, the new theory explained some of the cost gap in terms of economies of scale. The study also pointed out that tariffs increase costs by raising input prices. Finally, emphasis was shifted to the reduction in foreign tariffs, which were estimated to deliver more gains to the economy than the reduction in domestic tariffs.

More recently, Richard Harris and David Cox used their General Equilibrium Trade model (GET) to estimate the gains from multilateral as well as bilateral free trade.(5) Their approach, called a general equilibrium technique, allowed them to model the interaction of the various product and factor markets in the economy, thus capturing secondary effects on prices and wages. In addition, they used industry studies to incorporate in the model economies of scale at the firm level. The inclusion of scale economies and imperfect competition in the model's specification dramatically altered the pattern of adjustment from that assumed under traditional analyses. In the Harris-Cox studies, adjustment is seen as likely to take the form of intra-industry rationalization as some firms expand their scale of production to take advantage of the opportunities of access to an expanded market. And, while there is contraction in the output of some manufacturing industries, many exhibit overall gains as a result of bilateral free trade.

The Harris-Cox results indicate that, overall, Canadian real economic output is likely to increase by about 9.0% as a result of bilateral free trade. Table 1 shows the relative change in output and employment in manufacturing sectors of the Canadian economy. Some sectors, such as agricultural equipment, furniture, non-agricultural equipment, electrical equipment and miscellaneous manufactured products, show a

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(5) Richard G. Harris and David Cox, Trade Industrial Policy and Canadian Manufacturing, Ontario Economic Council, Toronto.

Richard G. Harris and David Cox, A Quantitative Assessment of the Economic Impact on Canada of Sectoral Free Trade with the United States, Working Paper Series, Ontario Economic Council, Toronto, 1984.

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TABLE 1: NATIONAL RESULTS - BILATERAL FREE TRADE - REAL OUTPUT - MANUFACTURING - PERCENTAGE DIFFERENCE FROM BASE

	Cox-Harris		Informetrica
	Output	Employment	Output*
Total Manufacturing	-	-	4.1
Food and Beverages	24.5	-2.3	4.7
Tobacco	27.7	-10.2	0.3
Rubber Products	36.9	4.9	1.9
Leather Products	24.2	-7.8	2.3
Textiles	239.4	156.1	-3.8
Knitting and Clothing	-	-	0.1
- Knitting	106.9	48.2	-
- Clothing	478.2	259.2	-
Wool	14.5	-12.8	-
Paper and Allied Products	59.8	31.3	1.3
Printing and Publishing	35.4	12.7	0.7
Petroleum and Coal Products	23.8	-7.7	2.3
Chemical and Chemical Products	22.7	0.4	1.1
Wood Products	-	-	1.2
Furniture	-15.7	-38.1	3.1
Primary Metals	-	-	10.1
- Iron and Steel	20.9	-1.3	13.7
- Primary Non-Ferrous Metals	-	-	4.3
Metal Fabrication	13.5	-7.9	8.7
Machinery	-	-	31.3
- Agricultural Equipment	-12.2	-26.7	-
- Non-Agricultural Equipment	-19.4	-34.6	-
Transportation Equipment	101.2	58.7	2.3
- Urban Transportation Equipment	61.4	28.2	-
Electrical Equipment	-1.5	-22.7	2.1
Non-Metal Mineral Products	20.9	-1.4	2.7
Misc. Manufacturing	-18.4	-33.2	-0.8

* Difference from base case scenario by year 2005.

Sources: David Cox and Richard Harris, A Quantitative Assessment of the Economic Impact on Canada of Sectoral Free Trade with the United States, Ontario Economic Council, December 1984, p. 24.

Informetrica Limited, Economic Impacts of Enhanced Bilateral Trade - National and Provincial Results, Informetrica Limited, Ottawa, 1985.

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decline relative to the base period. Due to substantial increases in productivity, however, a larger number of manufacturing industries show relative declines in employment. Despite increases in productivity, the knitting and clothing industries experience employment boosts of 48.2% and 259.2%, respectively.

When viewing the data from this study, it must be emphasized that this model compares economic output and its composition under status quo trade assumptions to bilateral free trade at a single point in time. Therefore, the data should not be read as indicating the absolute or relative change in these variables between now and the time a potential free trade arrangement is phased in. The changes must be taken in the context of probable significant growth in the overall economy as well as in many industries by that time.

Informetrica Limited, the Ottawa-based economic forecasting firm, produced a study for the federal government titled "Economic Impacts of Enhanced Bilateral Trade."(6) The study employed "The Informetrica Model" (TIM) of the Canadian economy and simulation studies of the United States by Wharton Econometric Forecasting Associates of Philadelphia, to derive national impact results. Informetrica's Regional Industrial Model (RIM) was used to measure the provincial impacts.

The study assumed that Canadian and U.S. tariff and non-tariff barriers were phased out over a five-year period (1988-92). A reduction in trade barriers was seen as likely to promote price reductions by domestic producers as they attempted to meet foreign competition. It was also expected to increase investment as Canadian firms expanded plant capacity to take advantage of enhanced access to U.S. markets. The study further assumes: free trade with Canada has no impact on the level of U.S. economic activity; the Canadian dollar exchange rate adjusts to changes in the current account, Canadian real growth, relative inflation

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(6) Informetrica Limited, Economic Impacts of Enhanced Bilateral Trade, August 1985. This case is called "enhanced" because it assumes reduction of tariff and non-tariff barriers as well as a productivity improvement.

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and interest rates in Canada and the U.S.; the Canadian government raises personal income taxes by an amount equal to the lost customs revenues.

Informetrica found that Canada-U.S. free trade resulted in an increase in real domestic product of 2.4% relative to the base case by the year 2005(7) (Table 2). Among the strongest components of final demand is investment spending as firms undertake plant expansion to meet increased competition and enhanced access to the U.S. market. Gross exports provide a significant spur to growth over the simulation period, but this is counterbalanced by increased imports leaving the trade balance effect almost neutral. The economy becomes more open as a result of free trade, but the real engines of growth over the period reside in the personal consumption and business investment components of final demand.

With respect to industrial sectors, manufacturing provides the greatest boost to growth over the period, with services, trade and transportation, storage and communications also furnishing significant contributions.

Overall employment in the economy is likely to increase by 146,000 by 2005 with employment gains likely in all industrial sectors except agriculture and manufacturing. It should be emphasized, however, that employment in these two sectors is lower when compared to a scenario without free trade, but not when compared to present employment levels. In fact, manufacturing employment rises from a current estimate of about 2.2 million to 2.5 million in 2005, while employment in agriculture rises from a current 0.5 million to 0.6 million over the same period. As a result of free trade, all other broad industrial sectors are likely to experience employment gains over a status quo scenario, according to Informetrica.

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(7) The base case is Informetrica Limited's "Post I-85 Forecast."

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TABLE 2: CANADA - REAL GROSS DOMESTIC PRODUCT - FREE TRADE INDUSTRY IMPACT - PERCENTAGE DIFFERENCE FROM BASE CASE SCENARIO

Total	2.38
Agriculture	1.73
Forestry	1.14
Fishing	15.22
Mining	3.04
Manufacturing	4.08
Construction	1.61
Utilities	1.51
Transportation, Storage, Communications	2.37
Trade	2.86
Housing	0.21
Finance, Insurance, Real Estate	1.45
Services	1.16
Administration	2.09

Source: Informetrica Limited, Economic Impacts of Enhanced Bilateral Trade - National and Provincial Results, Informetrica Limited, Ottawa, 1985.

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REGIONAL IMPACTS

A. The Atlantic Region

The Atlantic region's exports are predominately resource-based. In 1986, almost 85% of the region's exports to the United States were in the form of unprocessed raw materials, food products or inedible fabricated materials, compared with less than 47% for the country's as a whole. Recently, about 33% of the region's exports to the U.S. fell within the category of food, feed, beverages and tobacco, although this proportion has fluctuated over the years. Nationally, the food group represented about 4% of Canada's exports to the U.S. in 1986. Approximately 90% of the value of Atlantic region exports in this category is composed of fish and fish products, with the balance comprised of exports of fresh, chilled and frozen fruits and vegetables (including potatoes) and beer. This category is extremely important to Prince Edward Island, with 87% of the province's 1986 exports to the U.S. in the food group - mainly potatoes and lobsters.

Inedible crude materials composed primarily of metal ores, coal, asbestos and gypsum made up a relatively small proportion of the region's exports to the U.S.

Inedible fabricated materials, including products such as pulp and paper, lumber, metals, chemicals and electrical power, comprised about 49% of the region's exports to the U.S. in 1986.

Finished products represented about 15% of the region's exports to the U.S. in 1986, with tires and automobiles from plants in Nova Scotia a significant component of this group. Other exported products in this group included railway rolling stock, airplane components, ophthalmic products and electronic products.

Although only about 64% of the region's exports went to the United States in 1986 compared with about 78% of the country's as a whole, Canada-U.S. free trade should still have a significantly beneficial effect on the region's economy. The region's exports, being resource-based, face little or no duty in their raw, unprocessed form, but tariffs tend to escalate as the degree of processing increases. The fish products industry is one example where little local processing is done in order to avoid the tariffs on the processed product. Removal of these tariffs would allow processors to add value to fish products before exporting.

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Informetrica believes that the Atlantic region of the country is likely to show the largest percentage increase in real output. Table 3 indicates that, within the region, Prince Edward Island would fare particularly well with a 3.1% gain in output over the base case. All four provinces should experience gains from a larger fishing industry, while Newfoundland, New Brunswick and Nova Scotia should benefit from an increase in metal mining. Food manufacturing in Nova Scotia and New Brunswick are likely to be stimulated by the removal of non-tariff barriers. Employment and personal income are also likely to show measurable gains, according to the Informetrica study. However, the employment expansion should encourage a net migration into these provinces moderating real per capita income growth.

B. Quebec Region

Although Quebec's $15.1 billion in exports to the United States in 1986 were dwarfed by Ontario's total of $54.6 billion, the province is easily the second largest provincial trading partner with the United States. Forest products are extremely important exports for the province, with paper and paper products accounting for about $2.8 billion or over 18% of total exports, while softwood lumber exports were $626 million. Iron ore exports to the U.S. were $508 million in 1986. Other metal exports were also significant, including $1.5 billion of aluminum and ores, and $296 million of copper and ores. Electricity exports were $374 million; motor vehicles and parts, $2.2 billion; aircraft and parts, $735 million; other telecommunication equipment, $857 million. Total end products, or those goods made into final manufactured form for consumption, accounted for about 38% of Quebec's exports to the U.S., compared with 15% for the Atlantic provinces, 73% for Ontario, 8% for the Prairies, and 11% for the Pacific Region.(8)

The effects of free trade may possibly be less dramatic than some numbers suggest. Some industries have substantially restructured

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(8) Includes British Columbia and the Yukon Territory.

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TABLE 3: BILATERAL FREE TRADE - *PERCENTAGE DIFFERENCES FROM BASE CASE

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C., Yukon, Territories
Real Gross Domestic Product	2.4	2.4	3.1	2.4	2.3	2.1	2.9	2.4	1.8	1.5	2.2
Employment	1.0	2.8	2.7	1.7	1.3	0.8	0.9	1.5	0.9	0.6	1.2
Real GDP/ Employment	1.4	-0.3	0.4	0.7	1.0	1.4	2.0	1.0	0.9	0.9	1.0
Real Non-Residential Construction Investment	2.0	1.1	2.3	1.0	1.1	1.9	3.0	2.1	1.1	1.6	1.8
Real Per Capita Personal Income	3.0	2.0	2.8	2.7	3.1	2.8	3.3	2.8	3.1	2.8	2.9

* Percentage difference over the base case forecast in the year 2005.

Source: Informetrica Limited, Economic Impacts of Enhanced Bilateral Trade - National and Provincial Results, Informetrica Limited, Ottawa, 1985.

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since 1976 (the base year used in studies based on Cox and Harris). Many labour-intensive sectors have already lost ground to those which are capital-intensive. In addition, non-tariff barriers in the textiles, clothing and hosiery sectors are higher than they were 10 years ago.

Finally, the application of the Cox and Harris model to individual provinces does not take into account differences in the degree of competitiveness among provinces.

Three recent studies have examined the effects of bilateral free trade on Quebec: one by Denis, Stavrinidis and Tessier (which deals with manufacturing only) using the Cox and Harris model, one by Informetrica, and one a special study commissioned by the Quebec Ministry of Industry and Commerce.

According to the Denis-Stavrinidis-Tessier study (DST), Quebec will experience a 40% increase in employment as a result of bilateral free trade. Among the sectors with the largest increases in employment are: textiles (a 74% increase), clothing (a 262% increase), and transportation equipment (a 58% increase). Among the losers are: food (a 21% decline), electrical products (a 23% decline), and industrial materials (a 33% decline) (Table 4).

The 600-page Quebec government study (QG) examined 18 sectors of the Quebec economy, identifying the winners and losers from free trade:

> Overall, free trade would have positive effects on 4 sectors, negative effects on 12 sectors, and no effects on 2 sectors.
>
> The winners - non-metallic minerals; sports equipment; manufacturing of floor tiles and floor coverings; and wood. In all it would affect 30,000 jobs.
>
> The losers - .printing and publishing; jewellery; instrument manufacture; rubber and plastic products; electrical products; computer science; metal products; processed metals; footwear; manufacture of machines; furniture; clothing. It would affect 230,000 jobs.

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TABLE 4: THE IMPACT OF FREE TRADE ON THE EMPLOYMENT STRUCTURE IN THE MANUFACTURING SECTOR

	Quebec				Ontario			
	Employment structure				Employment structure			
	1976		After bilateral free trade		1976		After bilateral free trade	
Sub-sectors	000's	%	000's	%	000's	%	000's	%
Food	58	11.1	48	7.8	83	9.8	68	8.5
Tobacco	5	1.0	5	.7	3	.4	3	.3
Rubber	13	2.5	14	1.9	35	4.1	37	3.9
Leather	12	2.3	11	1.5	13	1.5	12	1.3
Textiles	34	6.5	59	8.1	30	3.5	52	5.5
Hosiery	14	2.7	20	2.7	7	.8	10	1.1
Clothing	66	12.6	239	32.7	23	2.7	83	8.7
Wood	25	4.8	22	3.0	20	2.4	18	1.9
Furniture	18	3.4	11	1.5	23	2.7	14	1.5
Paper	46	8.8	61	8.3	46	5.4	61	6.4
Printing	26	5.0	30	4.1	47	5.5	54	5.7
Metals[a]	27	5.2	28	3.8	71	8.4	74	7.8
Metal products	38	7.3	35	4.8	88	10.4	82	8.6
Machinery[b]	18	3.4	12	1.6	54	6.4	36	3.8
Transp. equip.[c]	31	5.9	49	6.7	106	12.5	167	17.5
Elect. prod.	30	5.7	23	3.1	81	9.5	63	6.6
Mining Products (non-metal)	14	2.7	14	1.9	27	3.2	27	2.8
Oil, coal	3	.6	3	.4	9	1.0	9	.8
Chemical ind.	27	5.2	27	3.7	43	5.1	43	4.5
Miscell.	18	3.4	12	1.6	41	4.8	27	2.8
	523	100	732	100	850	100	952	100

a steel only
b non-farming machinery only
c arithmetic average for urban and other types of transportation equipment

Source: Jean-Émile Denis, Christine Stavrinidis and Serge Tessier, "Les incidences sectorielles et régionales du libre-échange Canada-États-Unis," Études Internationales, Vol. XVII, March 1986, p. 45 and 47.

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> Finally, sectors which would reap neither advantages nor disadvantages: agriculture and the toy industry.(9)

The QG study and DST studies are not strictly comparable because of the greater degree of aggregation of the former. The QG study is not as optimistic about the clothing sector as the DST study, while both are quite pessimistic about electrical products.

Overall, the QG study is not at all favourable to free trade.

1. Specific Industries

The Department of Regional Industrial Expansion has recently assessed the state of most Canadian industries. The discussion to be presented of the textile industry, the clothing sector, household furniture, office furniture, converted wood products and the shoe industry, is drawn from DRIE papers.

a. Textiles

This classification includes primary textiles (fibre, yarn and fabric), carpets, and miscellaneous (canvas goods, household products).

In 1985, the industry employed 63,000 workers in 1,070 establishments. 65% of workers are in primary textiles, 27% in miscellaneous, and 8% in carpets.

According to 1983 data, 39% of the establishments, accounting for 52% of employment, are in Quebec. 41% of establishments and employment are in Ontario. Most production is in smaller communities.

In some segments of the industry, Canadian costs are lower; in some segments, higher. Basically in areas such as man-made fibre and filament yarn, where economies of scale are highly significant, Canada has a unit labour cost disadvantage.

Canada maintains high tariff production on textiles and, like most developed countries, excludes textiles and clothing from the General System of Preferences. Canada's average rates of duty will be 18%

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(9) Jean Blouin, "Le dossier secret de Québec," L'actualité, Vol. 11, No. 5, May 1986, p. 29.

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for textiles, compared with 9% for all manufacturing. In the United States, the corresponding rates for textiles will be 10.4%, while that for manufacturing will be 5%. In some industry segments, such as wool fabrics for which the tariff is 40%, U.S. tariffs constrain Canadian exports.

DRIE concludes that border measures affecting apparel imports are critical to the existence of the domestic textile industry. Given the diversity of the various segments of this industry, DRIE was unable to provide a meaningful statement of international competitiveness for the industry as a whole. Some areas will clearly be hurt by bilateral free trade, carpets for example, while others such as wool fabrics can benefit.

b. Clothing Sector

Approximately 103,000 persons are employed in the industry, 77% of whom are women. In addition to employment reported in published data, there are numerous homeworkers, estimated at about 30,000 in Quebec alone.

The industry is characterized by small establishments. 11% of the establishments, those with 100 employees or more, provide about half the jobs.

The industry is concentrated in Quebec (around 60% of employment), Ontario (28%) and Manitoba, and is located primarily in large urban centres such as Montreal, Toronto and Winnipeg.

In spite of high tariff protection (25%) and bilateral restraint arrangements with 21 low-wage suppliers, clothing imports have increased their share of the Canadian market from 32% in 1979 to 42% in 1985 (in volume terms). Employment has declined by some 18,000 workers over the same period.

Unit labour costs were about 10% higher in Canada than in the U.S. in 1983.

The average U.S. rate of duty on clothing is 22.5%.

In the area of standardized products, such as jeans and sport shirts, Canadian producers are at a marked disadvantage. The clothing sub-sectors where Canada has a slight advantage (products with more fashion content such as ladies' sweaters, sportswear and men's fine

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clothing) account for the bulk of the industry's overall shipments, and there may be good prospects for medium market growth.

There are also export opportunities in the areas of fur apparel, high fashion and outerwear.

c. Household Furniture

In total, the sector employs about 26,000 persons. In 1984, the industry was comprised of 949 establishments located mainly in Quebec (45%), Ontario (36%), and Manitoba (5%). 5% of the establishments employ 100 or more employees and account for about 45% of shipments.

With the Canadian dollar equal in value to 70 to 75 cents U.S., input costs in the Canadian household furniture industry are about equal to those in the U.S. household furniture industry and, on average, the Canadian industry is competitive with the U.S. industry.

The United States is by far the largest export market for Canadian household furniture, accounting for between 80 and 90% of total exports. In the U.S. market, with the value of the Canadian dollar between 70 and 75 cents, Canadian manufacturers are able to compete with products in which design, quality and service are as much or more a consideration as price, or in market segments not attractive to volume manufacturers.

d. Converted Wood Products
(kitchen cabinets, wood doors, wood windows, manufactured housing and other mobile homes, pallets and boxes, and other)

The industry accounts for approximately 2,000 establishments with 30,000 employees (19,500 in the classification "other"). Regionally, the industry is concentrated in southern Ontario and Quebec which have, respectively, 35% and 26% of the activity. British Columbia has 15%, with the remaining 25% spread across the Prairie and Atlantic provinces.

Canadian tariffs generally range from 9 to 15% on products manufactured by the sector; on average approximately double the rates in the United States.

Under Canada/U.S. free trade, it is estimated that the trade balance of $61 million of net exports would drop to $120 million of net imports. Employment would drop by about 12%, from 19,500 to 16,800. Most of this impact would occur in Ontario, Quebec and British Columbia where

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the industry is concentrated and where the markets are largest and most attractive.

e. Office Furniture

The sector employs about 9,600 persons. 14% of the establishments employed more than 100 persons and accounted for 65% of shipments. In 1984, Quebec produced 19% of all shipments; Ontario, 75%; and Alberta, 6%.

With the value of the Canadian dollar equal to 70 to 75 cents U.S., it is estimated that the Canadian office furniture industry's labour and material costs are about equal to those in the U.S. and, on average, the Canadian industry is competitive with the U.S. industry.

In the present period of industrial development, modernization and expansion of markets will be needed to improve the competitiveness of the industry.

f. The Canadian Footwear Industry

From January to October 1986, the average monthly employment in the industry was 13,700. Approximately 38% of workers reside in Quebec and 59% in Ontario. It can be expected that there will be a steady loss of jobs of up to 1,500 workers until 1988.

It is clear that even a complete restructuring of the industry would not enable this industry to maintain a 50% share of the Canadian market.

2. The Informetrica View for Quebec

The Informetrica study indicates that employment should increase slightly in Quebec as a result of free trade, but that productivity gains in manufacturing are likely to lead to employment losses in this sector. Once again, it should be noted that these are theoretical losses comparing a free trade scenario to a status quo trade barriers scenario, and do not represent actual losses from current levels. This study is not optimistic about the impact of free trade on Quebec's textile industry, on the knitting and clothing industry, and the province's non-durable manufacturing sector in general. However, employment gains in

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the service sector are seen as likely to more than compensate for employment losses in the manufacturing sector.

C. Ontario

Canadian domestic exports to the United States totalled about $90.3 billion in 1986. Of this amount, Ontario exported $54.6 billion, or 60.5%. Some $31.0 billion of Ontario's exports to the U.S., or 56.8%, were composed of motor vehicles and parts. Altogether, approximately 96% of Ontario's exports to the United States contained some level of fabrication.

In terms of imports, Ontario accounted for 75.4% of Canadian purchases of U.S. goods in 1986, with about 44% of these imports composed of motor vehicles and parts.

Over 80% of Ontario's imports are purchased from the U.S., and in excess of 90% of provincial exports are destined for the U.S. market. These data indicate the overwhelming importance of the United States to provincial trade. Clearly, any trade agreement with the United States will have significant repercussions on the provincial economy, particularly on Ontario's manufacturing sector.

A background paper prepared by the Ontario Ministry of Industry, Trade and Technology in November 1985 examined 112 manufacturing industries in Ontario, accounting for about 96% of manufacturing employment, and attempted to make an assessment of the direct employment effects of free trade on the province's manufacturing sector.(10) The study identified a number of manufacturing sectors (representing 281,000 jobs or over 31% of the province's total manufacturing jobs) as being potentially vulnerable to import competition, despite relatively high tariff and non-tariff barriers.

Among those thought to be particularly sensitive to free trade are segments of the following industries: leather, textiles, knitting, some wood products, furniture and fixtures, some types of paper

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(10) Ontario, Ministry of Industry, Trade and Technology, Assessment of Direct Employment Effects of Freer Trade for Ontario's Manufacturing Industries, November 1985.

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manufacturing, printing and publishing, metal fabrication, some transportation equipment, certain electrical manufacturing, non-metallic mineral production, certain chemical manufacturing, and miscellaneous manufacturing (Appendix 1).

The study also identified a second group of industries, employing about 275,000 persons in 1983 or 31% of manufacturing employment. This group, while still protected by tariff or non-tariff barriers, was seen as able to respond to free trade through increased penetration of the U.S. market.

A third group, employing almost 107,000 persons in 1983 or 12% of manufacturing employment, had a low level of tariff protection and could compete in either the foreign or domestic market.

As already indicated, the motor vehicle and parts manufacturing industry is of paramount importance in Ontario's trade performance with the United States. Employing as it does almost 92,000 persons or about 10% of manufacturing employment, any disruption of the industry as a result of free trade would have serious consequences for the province's economy. At present, new motor vehicles and parts trade between the two countries free of duty, subject to individual Canadian manufacturers meeting production to sales ratios and value-added requirements. In recent years, the Canadian automobile industry has exceeded these safeguards by a substantial margin; however, the Ontario government remains apprehensive that a move to free trade would either eliminate the safeguards or make them irrelevant. And, while Canadian officials have denied that the Auto Pact will be eliminated, it is unclear as yet how it will fit into a free trade arrangement. Other related issues which are likely to be important in the free trade negotiations include the Canadian government policy of remitting duty back to non-North American automakers who meet Canadian production level requirements, and financial incentives offered to automobile manufacturers to locate plants in this country. Changes to either policy may alter future auto-related investment and production decisions in the province.

Overall, the Informetrica study is fairly optimistic about the future of Ontario's manufacturing sector under free trade, but

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nevertheless, foresees some job loss relative to the base case scenario due to substantial improvements in productivity as a result of industry rationalization and plant elimination. However, the study estimates that meaningful gains in the service industries would more than counteract these employment losses. Total employment is estimated to increase by almost 1% while real per capita personal income in the province would rise 3.3% by 2005, according to Informetrica (Table 3).

D. The Prairie Provinces and British Columbia

The Prairie provinces' exports to the United States are dominated by shipments of resource-based goods; petroleum and natural gas represented about 56% of the region's exports to the U.S. in 1986. When other goods based on this resource are included, such as petrochemicals, the region's overwhelming reliance on this resource for export to the U.S. is evident.

For its part, British Columbia's exports were also primarily resource-based, with about 65% of shipments to the United States composed of forest products.

The western provinces have long supported the idea of free trade in the belief that the present system of tariffs is designed to protect the manufacturing sector of central Canada at the cost of higher prices for other regions. The Informetrica study indicates that, indeed, a reduction in Canadian tariff rates does lower prices and consequently provide higher household incomes for the West. The impact of free trade on exported goods from the Prairie provinces of Manitoba, Saskatchewan and Alberta, however, is not substantial. This is essentially because the existing level of U.S. tariffs on the region's resource-type exports is already quite low. Agricultural products, raw minerals and oil and gas all face little or no U.S. tariff barriers. Critical to the Informetrica outlook for the Prairies, however, is the assumption that energy production would not respond to free trade. If this assumption were relaxed, the region's outlook would be significantly rosier.

Manitoba, with its more diversified economy, is likely to experience an increase in real output of 2.4%, equal to the national

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average (Table 3). Saskatchewan and Alberta are estimated to exhibit gains in real output of 1.8% and 1.5%, respectively. Employment gains in the three provinces correspond to the relative gains in output, but with Manitoba exceeding the national average and Saskatchewan and Alberta doing less well than average.

British Columbia, although also resource-oriented, is likely to benefit from strong growth in fisheries and from increased production of primary metals and coal. Real output is estimated to increase 2.2% over the base case in British Columbia, the Yukon and the Territories, while employment should gain 1.2%.

One western Canadian industry which might benefit from a free trade arrangement with the United States is petrochemicals. The U.S. industry is at present receiving greater protection than the Canadian industry for certain types of products, and a large proportion of plants in Canada are of recent vintage. The United States is the largest external market for western petrochemicals but up until recently, less than 30% of Alberta petrochemicals were shipped into that country. The trend has been for Canadian tariff levels on petrochemical imports to be generally lower in recent years with duty rates equal to 11.4% in 1983, down 1.5% from five years earlier. Present Canadian tariff levels tend to increase with the degree of processing, while U.S. rates are often higher on the least-processed products, thus providing some inducement for adding value in Canada.

A study which examined free trade in this sector decided that the small plants built in the 1940s to 1960s, mainly in Quebec and Ontario, producing organic and specialty chemicals, would be threatened under free trade.(11) But the study also noted that considerable restructuring of the industry could take place with an increase in large capital-intensive plants that could have industrial spin-offs and provide additional high quality jobs. The generally high level of skill and mobility of the industry's work force would likely facilitate adjustments in the industry, according to the study.

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(11) Gilbert R. Winham, Canada-U.S. Sectoral Trade Study: The Impact of Free Trade, Centre for Foreign Policy Studies, Dalhousie University, Halifax, 1986, p. 131.

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CONCLUSION

While traditional economic theory would have us believe that a move to free trade will increase the Canadian propensity to produce resources at the expense of the manufacturing sector, more recent evidence suggests otherwise. In fact, what now seems more likely in the event of free trade is an expansion of the manufacturing sector as well as of resource-producing industries. However, it appears that overall expansion of manufacturing must be purchased at some cost in terms of restructuring and labour adjustment. Fortunately, much of this labour adjustment is likely to take place within industries rather than intersectorally, as traditional theory would imply, and will thus impose a lower transition cost on workers.

With respect to the various regions, central Canada stands to obtain significant benefits from an expansion of the manufacturing sector as a result of a free trade arrangement, but at some cost, as the relatively inefficient protected manufacturing industries are forced to rationalize or be driven out of business. The other regions of the country will benefit through lower priced imports and as a result of lower U.S. tariff barriers to some of their resource-based products.

The view held by the majority of economists is that free trade would result in economic gains to Canadians. The disagreement emerges when the exact size of the gains or the sectoral impact is discussed. Michael McCracken and Carl Sonnen of Informetrica Limited probably express the consensus view of economists when they state the following:

> In any event, we judge that the size of the impacts, while interesting, is not critical to the debate; what is important is the character of the results. There is "dislocation", but virtually all income, spending, and producing sectors, in all of the provinces, gain from Free Trade. It is difficult to conceive of any other policy setting that could provide such gains to everyone without encumbering future generations with an enlarged debt load. And Free Trade implies "secured access". The significance of this will depend on circumstances largely beyond Canadian control.(12)

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(12) Informetrica Limited, "Free Trade - The Economic Case is Positive," Monthly Economic Review, November 1985.

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An additional consideration not evaluated in this paper is the looming threat of U.S. protectionism and its negative consequences for any status quo scenario. If a free trade arrangement can shelter Canadian exports from the brunt of U.S. countervail and anti-dumping laws, the benefits outlined in this paper may seriously underestimate the gains realized from such an agreement.